7.5 Solving Quadratic Equations by Factoring

Solving a quadratic, means to find the ZEROS or the x-intercepts of an quadratic function.

You can find the zeros algebraically using factoring.

**Example:** \( x^2 + 8x + 15 = 0 \)

**Example:** \( x^2 - 7x - 18 = 0 \)  \hspace{1cm}  **Example:** \( x^2 - 9 = 0 \)

**Example:** \( 2x^2 - 11x = -5 \)

How do you know if your solution is correct?
Working in reverse. What quadratic equation could have the roots -6 and 8?

How about roots of $\frac{3}{5}$ and $\frac{1}{2}$?